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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kamala Diane Urs

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EXAMINER

LE, VIET Q

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/759,923

Applicant(s)

URS ET AL.

Examiner

Viet Q. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/12/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 1-8, 10-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 10 and 14, of U.S. Patent No. 6,148,204.

3. Regarding claims 1 and 17, subject matter claimed in claim 1 and 17 of the instant application are disclosed in claim 1 of U.S. Patent No. 6,148,204. Both the application and the U.S. Patent No. 6,148,204 disclosed distributed location register comprising of one or more communication registers and the protocol interface.

Claim 1 and 17 of the instant application did not go into details of what the service request coming from the communication entities consist of.

It would be obvious to one having ordinary skill in the art at the time the invention was made to modify claim 1 of the U.S. Patent No. 6,148,204 to only include the protocol interface and the communication registers as in claim 1 of the instant

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application and only describe the protocol interface functionalities like in claim 17 of the instant application. The motivation is to separate the hardware design of the distributed location register from the content of the service request.

4. Regarding claim 2, claim 1 of U.S. Patent No. 6,148,204 fails to point out the direct coupling between the protocol interface and the communication service registers as specified in claim 2 of the application.

It would be obvious to one having ordinary skill in the art at the time the invention was made to directly couple the protocol interface and the communication registers. The motivation is to reduce the packaging complexity and to simplify the communication exchange between the 2 devices.

5. Regarding claims 3 and 4, claim 1 of U.S. Patent No. 6,148,204 fails to point out the communication networks like: a public switched telephone network, the internet, a satellite communication infrastructure and an ATM infrastructure, used to connect the protocol interface and the communication service registers as specified in claims 3 and 4 of the application.

It would be obvious to one having ordinary skill in the art at the time the invention was made to link the protocol interface and the communication registers using the communication networks like: public switched telephone network, internet, satellite network or ATM infrastructure. The motivation is to make the connection between the 2 devices flexible using any available communication network and an ability to centralize the communication parameters database.

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6. Regarding claim 5, both claim 5 of the instant application and claim 4 of U.S. Patent No. 6,148,204 describe service types including telephony services, video services, multimedia services, packet data services, dispatch services.

Claim 4 of U.S. Patent No. 6,148,204 fails to specifically spell out telephony services to be including: GSM and CDMA as specified in claim 5 of the application.

It would be obvious to one having ordinary skill in the art at the time the invention was made to understand that telephone services also include telephone services in areas of GSM and CDMA telephone services.

7. Regarding claim 6, both claim 6 of the instant application and claim 1 of U.S. Patent No. 6,148,204 address the communication parameters to be associated with each of the communication service register. They also defined and linked these communication parameters with authorized services for the communication entities.

Claim 1 of U.S. Patent No. 6,148,204 fail to point out clearly the functionalities and objectives of the communication parameters as specified in claim 6 of the instant application. Claim 1 of U.S. Patent No. 6,148,204 only describe the service request would comprise the change request field and data field for communication parameters.

It would be obvious to one having ordinary skill in the art at the time the invention was made to understand that these communication parameters associated with each of the communication service register are associated with authorized services for the communication entities. The motivation is to specifically spell out the objectives and functionalities of the communication parameters when designing the communication service registers separately from the distributed location register.

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8. Regarding claim 7, subject matter claimed in claim 7 of the instant application is disclosed in claim 10 of U.S. Patent No. 6,148,204. Both described the communication service register would include database unit or memory unit where communication parameters and programming instructions are stored.

Claim 10 of U.S. Patent No. 6,148,204 describes not only the database or memory portion, but also describe the protocol interface and the processing circuitry.

It would be obvious to one having ordinary skill in the art at the time the invention was made to separate claim 10 of the U.S. Patent No. 6,148,204 and only include the database or memory unit. The motivation is to separate the database or the memory unit as a stand-alone unit so that this device can be located locally or remotely for simplifying centralizing network design.

9. Regarding claims 8, 13 and 14 of the instant application, both claims 8, 13 and 14 of the instant application and claim 1 of U.S. Patent No. 6,148,204 describe the same basic functionalities of either a Home Location Register or a Visitor Location Register.

Claim 1 of U.S. Patent No. 6,148,204 fails to define this distributed location register to be used as a home location register, a visitor location register or both.

It would be obvious to one having ordinary skill in the art at the time the invention was made to understand that basic structure described in claim 1 of U.S. Patent No. 6,148,204 can be used for either a Home Location Register or a Visitor Location Register or both as described in claims 8, 13 and 14 of the instant application. The

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motivation is to use the same hardware design for either a stand alone home location register, a stand alone visitor location register or both collated in the same box.

10. Regarding claim 10 subject matter claimed in the instant application is disclosed in claim 14 of the patent. They both describe the communication service register comprises an input/output port and a processing circuit.

Claim 14 the U.S. Patent No. 6,148,204 not only includes the input/output port and the processing circuit as in claim 10 of the instant application but also include the communication registers.

It would be obvious to one having ordinary skill in the art at the time the invention was made to modify separate claim 14 the U.S. Patent No. 6,148,204 to only include the input/output port and the processing circuit. The motivation is to separate the communication register unit as a stand-alone unit so that this device can be located locally or remotely for simplifying centralizing network design.

11. Regarding claims 11 and 12 subject matter claimed in the instant application is disclosed in claim 1 of the patent. They both describe the protocol interface facilitating accessing and updating one or more sets of communication parameters in communication service registers.

Claim 1 of the U.S. Patent No. 6,148,204 not only includes the protocol interface but also includes 1 or more communication registers.

It would be obvious to one having ordinary skill in the art at the time the invention was made to separate claim 1 of the U.S. Patent No. 6,148,204 to only include the

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protocol interface. The motivation is to separate the protocol interface functionalities from the communication service registers to be flexible in network design.

12. Regarding claim 15 and 18 subject matter claimed in the instant application is disclosed in claim 2 of prior U.S. Patent No. U.S. Patent No. 6,148,204. They both describe the method between the protocol interface and the communication service registers identifying communication parameters to be changed.

Claim 2 of the U.S. Patent No. 6,148,204 further identifying communication service register storing communication parameters by determining at least one service type of the request, wherein the at least one service type is used to identify the at least one selected communication service register.

It would be obvious to one having ordinary skill in the art at the time the invention was made to modify claim 2 of the U.S. Patent No. 6,148,204 to include what are described in claims 15 and 18 of the instant application.

13. Regarding claim 16, subject matter claimed in the instant application is disclosed in claims 2 of U.S. Patent No. 6,148,204. They both describe identifying the communication service register is accomplished in response to a request.

Claim 2 of U.S. Patent No. 6,148,204 fails to point out specifically reading an identification code contained within the request.

It would be obvious to one having ordinary skill in the art at the time the invention was made to understand that the request does contain the identification code of the communication service register. The motivation is to specifically spell out the designated

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code to be used in identifying the communication service register contained in the service request.

14. Regarding claim 19, subject matter claimed in the instant application is disclosed in claim 10 of U.S. Patent No. 6,148,204. They both describe the structure of the protocol interface or the communication service register.

Claim 10 of U.S. Patent No. 6,148,204 fails to point out the communication service register port.

It would be obvious to one having ordinary skill in the art at the time the invention was made to make the port available connected to the processing circuit for input/output communication purposes. The motivation is to make the port available for communication with other entities.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

16. Claims 1-8 and 10-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Keijo Tapio Laiho (U.S. 6,097,942), hereinafter referred to as Laiho.

17. Regarding claim 1, Laiho described the distributed location register, which can be used as either a Home Location Register, or a Visitor Location Register. This location register comprises of communication registers, which could be database for storing communication parameters, and a device that can facilitate the communication with the databases responding to requests for update from the communication entities. (See Fig. 1, block 14; fig.2; column 5, lines 1-42)

18. Regarding claim 2, Laiho described the direct connection between the communication service registers r databases with the protocol interface or Mobile switching center (MSC). (See Fig. 1, block 14; Fig. 13; column 5, lines 1-42)

19. Regarding claim 3 and 4, Laiho described the connection between the database unit and the MSC can either be direct or over the communication network. (See column 5, lines 12-18)

20. Regarding claim 5 and 6, Laiho described the distributed location register or home location register would comprise of different service groups like: telephony services, message services, calling line presentation services, mobile telephone services, television, etc ... Within each of these service groups, parameters would be assigned in according with each service group offering. (See Fig. 2, block 50; column 5, lines 18-28; column 6, lines 31-39; column 7, lines 41-54)

21. Regarding claim 7, Laiho described the home communication register to be consisting of the database or the memory unit. (See Fig. 2, block 30 and block 50; column 5, lines 1-7; column 6, lines 10-25)

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22. Regarding claim 8, 13 and 14, Laiho described HLR and VLR can be integrated or as a stand-alone unit. (See column 5, lines 28-39)

23. Regarding claim 10, Laiho described the diagram showing input/output port of the HLR consisting of the database units or communication service register units along with the VLR handler or the processing circuit. (See Fig. 3, block 16)

24. Regarding claims 11 and 12, Laiho described the communication facilitation between the VLR handler (the protocol interface) with the database or the communication service register units. (See Fig. 3, block 16; column 6, lines 56-67; column 7, line 1)

25. Regarding claim 15-18, Laiho described the handling procedure or communication protocol when receiving a request from a communication entity to the HLR including identifying the appropriate database unit or communication service register unit, identifying parameters for the particular service, determining the change and providing the changes accordingly. The identification of the appropriate database is included in the service request. The handler will identify the appropriate database for the requested service group and the requested parameter accordingly. (See column 9, lines 14-39)

26. Regarding claim 19, Laiho described input/output port receiving the service request, the processing device like the command analyzer and the handler unit and the database unit. (See Fig. 3, block 16; column 6, lines 56-67; column 7, lines 1-14)

Claim Rejections - 35 USC § 103

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffpauir (U.S. Registration Number H1,896).

29. Regarding claim 9, Hoffpauir discloses the network management system concept where the system will provide all the operation and maintenance features for a telecommunication system like a mobile telephone network. The system includes a configuration management server for performing configuration management for radio and switching functions, a fault management server for performing fault management, an accounting management for performing accounting management and a database server to store events as well as alarm information. (See Fig. 1, block 14; fig. 2, block 70; fig. 3; column 4, lines 18-67; column 5, lines 1-20; column 15, lines 64-67; column 16, lines 1-67; column 17, lines 1-16).

Hoffpauir, however, fails to specifically point out the operational requests for service operation and management, visitor location register location, system update, call routing and fault recovery.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to understand that these operation requests are sub set of the

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overall network management concept and should include functionalities for operational requests of service operation and management, visitor location register location, system update, call routing and fault recovery as suggested by Hoffpauir into the invention of Laiho as described in U.S. Patent No. 6,148,204. The motivation is to be able to provide the users a more comprehensive status of the system like: operating status of the system, the location of the VLR where the communication entity is being located, call routing, fault recovery and VLR supplemental services.

Conclusion

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Anthony G. Fletcher et al. (U.S. H1,897), Merged operation and maintenance center and method for operation.
- b) Jennifer A. Pierce et al. (U.S. 6223035), Method for providing a subscriber record for packet data registration of a station.
- c) Jagdish Venkata Sonti et al. (U.S. 6,108,540), Multi-profile subscriber.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Q. Le whose telephone number is 571-272-2246.


The examiner can normally be reached on 8 AM -5 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VL


RICKY NGO
PRIMARY EXAMINER